

WHAT IS CLAIMED IS:

1. A microcomputer, comprising:  
a microcomputer unit; and  
a power supply circuit controlling power supply voltage for said  
microcomputer unit,

5       said power supply circuit including  
a power supply input terminal to which external power supply  
voltage is applied,

a low pass filter provided between said power supply input terminal  
and said microcomputer unit,

10       a switch element connected in parallel with said low pass filter,  
between said power supply input terminal and said microcomputer unit, and  
a control circuit controlling on and off of said switch element.

2. The microcomputer according to claim 1, wherein said control  
circuit controls on and off of said switch element depending on whether or  
not a flash memory included in said microcomputer unit is being written.

3. The microcomputer according to claim 1, wherein said control  
circuit controls on and off of said switch element depending on whether or  
not said power supply voltage is lower than a predetermined voltage.

4. The microcomputer according to claim 1, wherein said control  
circuit is a register holding on-off information of said switching element.

5. The microcomputer according to claim 4, further comprising:  
a clock input terminal to which an external clock signal is input;  
a frequency divider dividing a frequency of said external clock signal  
by two; and

5       a selector selecting either one of an external clock signal having a  
frequency divided by two by said frequency divider and an external clock  
signal not subjected to frequency division by two depending on the on-off

information of said switch element held by said register, and supplying it to said microcomputer unit.

6. The microcomputer according to claim 1, wherein said control circuit is a register controlling on and off of said switch element in response to a data signal from a memory included in said microcomputer unit.